

**REMARKS**

Claims 3-5, 8-16, and 19-24, and 26-27 are currently pending in this application. Claims 1 and 17 have been cancelled, claims 8-9, 11-13, 16, 19-21, and 23-24 have been amended, and new claims 26 and 27 have been added.

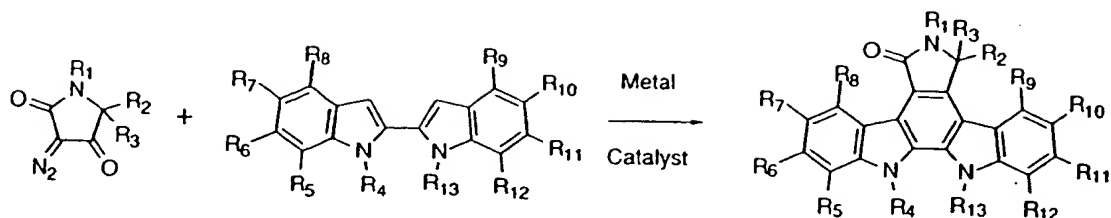
Reconsideration and withdrawal of the rejections of all of the claims of the application in view of the amendments made above and the remarks to follow is respectfully requested.

New claims 26 and 27 contain many of the same or similar limitations that were previously contained in claims 1 and 17, which have been canceled in this amendment.

Applicants respectfully submit that new independent claims 26 and 27 are fully supported by the above-referenced application and are also fully described in both the PCT and the provisional application to which this application claims priority, as discussed in more detail below. Therefore, Applicants respectfully submit that the effective date of the instant application is 11 August 1995, which is the filing date of the provisional application, and that Applicants are entitled to priority as of that date.

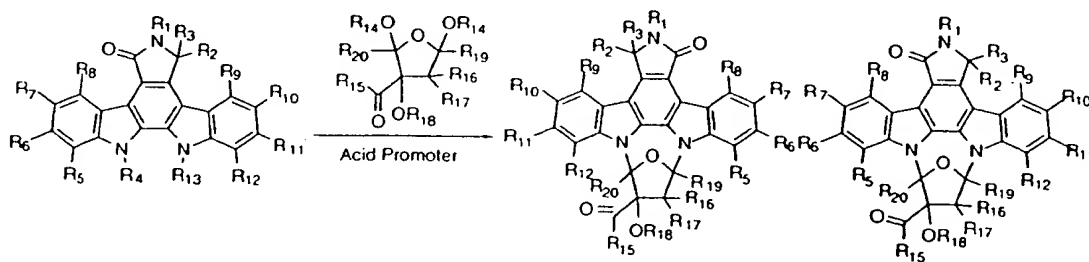
The reaction scheme set out in newly presented claims 26 and 27 is fully described in pages 78-82 of provisional application Serial No. 60/002,164, which is specifically incorporated by reference into the present application. Furthermore, this reaction scheme is also fully disclosed, and carried forth, in both the PCT application and the instant application. A discussion of the specific support for each limitation of claims 26 and 27 is provided below.

Page 78 of the provisional application sets out the reaction of a diazo compound with a biindole in the presence of a metal catalyst to produce an indolocarbazole, as set forth below:



$R_1$  is defined as 3,4-DMB, or PMB or Bn or *t*-Bu and  $R_2$ - $R_{13}$  are defined as H. Page 80 lists a variety of alternative procedures for the above reaction – In addition to the preferred procedure, a variety of alternative reagents, reaction conditions, and work-ups could be employed. Specifically, suitable substrates include compounds wherein  $R_1$ - $R_{13}$  equal any combination of saturated or unsaturated, branched, linear, or cyclic alkyl, heteroalkyl, aryl, or heteroaryl group(s) where hetero refers to (O, S, N, or P). Many metals (e.g., Cu, B, Ti, etc.) have been found to serve as catalysts for the decomposition of diazo compounds to carbenes and carbenoids as have a variety of photolytic conditions. Hence any of these methods could be employed to effect this conversion. Any protic or non protic co-solvent compatible with and capable of solvating the substrates and reagents could serve as a suitable reaction medium.

Page 81 of the provisional application sets out the reaction scheme for reacting the indolocarbazole with an acetal to produce a furanosylated product as set forth below:



$R_1$  is defined as 3,4-DMB, or PMB or Bn or *t*-Bu;  $R_2$ - $R_{13}$  and  $R_{16}$ - $R_{19}$  are defined as H;  $R_{14}$  and  $R_{20}$  are defined as  $CH_3$ ; and  $R_{15}$  is defined as  $OCH_3$ . Page 82 lists a variety of alternative procedures for the above reaction – In addition to the preferred procedure, a variety of alternative reagents, reaction conditions, and work-ups could be employed. Specifically, suitable substrates include compounds wherein  $R_1$ - $R_{19}$  equal any combination

of saturated or unsaturated, branched, linear, or cyclic alkyl, heteroalkyl, aryl, or heteroaryl group(s) where hetero refers to (O, S, N, or P). Many protic and Lewis acid catalysts have been demonstrated to promote transacetalization reactions (e.g., p-toluene sulfonic acid, boric acid, sulfuric acid, perchloric acid, etc.). Hence any of these or similar promoters (catalysts) could be employed to effect this conversion. Any protic or non protic co-solvent compatible with and capable of solvating the substrates and reagents could serve as a suitable reaction medium.

Thus, pages 78-82 of the provisional application describe the same reaction formulation as set forth in the PCT application and the instant application, as distinctly claimed in new claims 26 and 27, Applicants respectfully submit that the claims are fully supported by the above referenced application, and that Applicants are entitled to rely on the filing date of the provisional application as the effective filing date of the instant application.

### **35 U.S.C. § 112 Rejections**

Claims 17 and 19-25 stand rejected under 35 U.S.C. §112, first paragraph because the amendment to the process of claim 17, wherein R includes the moiety Me optionally partially or fully halogenated, is not described in the specification. As discussed above, Applicants have canceled claim 17. New claims 26 and 27 do not include the limitation of R being the moiety Me optionally or fully halogenated.

Claims 1, 3-5, 8-17, and 19-25 stand rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

Claims 1 and 17 are rejected by the Examiner as being vague and indefinite because it was unclear what is meant by the definition of the acetal having the ring structure which is not in the form of a proper Markush group and where the second moiety is not a ring.

As discussed above, Applicants have cancelled claims 1 and 17. Newly presented claims 26 and 27 define the acetal in the form of a proper Markush group and also simply refer to a structure, instead of a ring structure to more properly incorporate the different moieties.

Claims 8, 11, 12, and 19 were rejected because they recite the limitation that R is methyl in the structures, and thus lack antecedent basis. Claim 12 was also rejected for reciting the limitation that R is HOCH<sub>2</sub> in the second structure. These claims have been amended to depend from new claims 26 and 27, which affirmatively recite that R can be methyl or HOCH<sub>2</sub>. Therefore, Applicants respectfully submit that there is now sufficient antecedent basis for these limitations in the claims.

Claims 8, 12, and 13 were rejected as being vague and indefinite for not ending with a period. Applicants have amended the claims so that they end with a period. Claim 16 was rejected for being vague and indefinite for the misspelling of diazolactam. Applicants have amended claim 16 to correct the typographical error.

Claim 17 was rejected as being vague and indefinite because it was not known what was meant by the language of the claim. As discussed above, claim 17 has been cancelled. New claim 27, which is similar to claim 17, has language which is believed more clearly defines the invention.

Claim 25 was rejected for not providing antecedent basis for the definition of R. Applicants have canceled this claim in the present amendment.

Reconsideration and withdrawal of the rejection of claims 3-5, 8-16, and 19-24 are respectfully requested.

**Rejections under 35 U.S.C. § 102**

Claims 1, 3-5, 8-17, and 19-24 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Wood et al., Tetrahedron Letters, 1996.

Applicants have canceled claims 1 and 17 and have provided new claims 26 and 27 which are fully supported by the provisional application, filed 11 August 1995. Applicants have specifically demonstrated in the discussion above that each and every element of newly presented claims 26 and 27 has support in the provisional application, which is expressly incorporated by reference into the PCT application as well as the instant application. Applicants respectfully submit that they are therefore entitled to priority as of the date of the provisional application.

The effective filing date of Applicants' application is 11 August 1995, the date of the provisional application. Wood et al., Tetrahedron Letters, is dated in 1996. Therefore, this reference is not available as prior art under 35 U.S.C. § 102(b) and/or (e). Reconsideration and withdrawal of the rejection of claims 3-5, 8-16, and 19-24 as allegedly being anticipated by Wood et al. is respectfully requested.

Claims 1, 3-5, 8-17, and 19-24 also stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Wood et al., Journal of the American Chemical Society, 1995.

As discussed above, Applicants have canceled claims 1 and 17 and have provided new claims 26 and 27 which are fully supported by the provisional application, filed 11 August 1995. Applicants have specifically demonstrated that each and every element of newly presented claims 26 and 27 has support in the provisional application, which is expressly incorporated by reference into the both the PCT application and the instant application. Applicants respectfully submit that they are therefore entitled to priority as of the date of the provisional application.

The effective filing date of Applicants' application is 11 August 1995, the date of the provisional application. The cited reference, *Total Synthesis of (+) – and (-)- K252a*, was published in the *Journal of the American Chemical Society* on October 18, 1995. Therefore, this reference is not available as prior art under 35 U.S.C. § 102(b) and/or (e). Furthermore, the entire text of this reference is contained in Applicants' provisional patent application (in particular, see pages 9-15 of the provisional application).

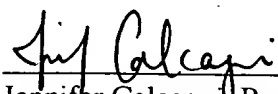
Reconsideration and withdrawal of all of the claims as being anticipated by Wood et al., *Tetrahedron Letters*, 1996 and Wood et al., *Journal of the American Chemical Society*, 1996 is respectfully requested.

#### CONCLUSION

Applicant believes that the foregoing is a full and complete response to the Office Action of record. Accordingly, an early and favorable reconsideration of the rejection of all of the claims is requested. Applicants believe that claims 3-5, 8-16, and 26-27 are now in condition for allowance and an indication of allowability and an early Notice of Allowance is respectfully requested.

If Examiner feels that a telephonic interview would be helpful, she is requested to call the undersigned at (203) 575-2648.

Respectfully submitted,

  
Jennifer Calcagni, Reg. 50,207  
Carmody & Torrance LLP  
50 Leavenworth Street  
P. O. Box 1110  
Waterbury, CT 06721-1110  
(203) 575-2648